

WHAT IS CLAIMED IS:

1. A negative active material slurry composition for a rechargeable lithium battery comprising:

a negative active material;

5 a compound comprising elements selected from the group consisting of transition metals, alkaline metals, alkaline earth metals and semi-metals; and an organic solvent.

2. The negative active material slurry composition of claim 1 wherein the transition metal is selected from the group consisting of Mn, Ni, Fe, Cr, Co, Cu and Mo, the alkaline metal is selected from the group consisting of Na and K, the alkaline earth metal is selected from the group consisting of Ca and Mg, and the semi-metal is selected from the group consisting of B, Al, Ga, Si and Sn.

3. The negative active material slurry composition of claim 1 wherein the transition metal compound is nickel hydroxide, the alkali earth metal compound is calcium oxalate monohydrate, and the semi-metal compound is boron compounds or tetraethylene orthosilicate.

4. The negative active material slurry composition of claim 1 wherein the compound includes at least one boron compound.

20 5. The negative active material slurry composition of claim 4 wherein the boron compound includes B_2O_3 , H_2BO_3 or BF_3

6. The negative active material slurry composition of claim 1 wherein the amount of the compound is 0.05 to 30 wt %.

7. A method of manufacturing a negative electrode for a rechargeable lithium battery comprising the steps of:

mixing a negative active material with a compound, the compound comprising elements selected from the group consisting of transition metals, 5 alkaline metals, alkaline earth metals and semi-metals;

adding an organic solvent to the mixture;

coating the resulting mixture on a current collector; and

drying the coated current collector and pressing the dried current collector

8. The method of claim 7 wherein the transition metal is selected from the group consisting of Mn, Ni, Fe, Cr, Co, Cu and Mo, the alkaline metal is selected from the group consisting of Na and K, the alkaline earth metal is selected from the group consisting of Ca and Mg, and the semi-metal is selected from the group consisting of B, Al, Ga, Si and Sn.

Sub A3
15 9. The method of claim 7 wherein the transition metal compound is nickel hydroxide, the alkali earth metal compound is calcium oxalate monohydrate, and the semi-metal compound is boron compounds or tetraethylene orthosilicate.

10. The method of claim 7 wherein the compound includes at least 20 one boron compound.

11. The method of claim 10 wherein the boron compound includes B_2O_3 , H_2BO_3 or BF_3

Sub C3
12. The method of claim 7 wherein the amount of the compound is

~~B~~ Sub
Contd
and out

0.05 to 30 wt %.